

Serial No.: 10/731,374
Amdt. Dated January 13, 2006
Reply to Office action of October 17, 2005

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REMARKS

In the Office Action of October 17, 2005, claims 35-48 were rejected. Claim 49 was withdrawn pursuant to an earlier restriction requirement and election. The October 25, 2005 Office action has been carefully considered. The Applicant respectfully requests reconsideration of the application by the Examiner in light of the following remarks.

The Examiner objected to the specification because of informalities. The Examiner required appropriate correction. Accordingly, the Applicant has amended the specification as shown in page 2 of this response.

35 USC § 103(a) Rejections

The Examiner rejected claim 35 under 35 U.S.C. 103(a) as being unpatentable over Amna et al. (US Patent 6,292,247; hereinafter called "Amna") in view of Fukuhara et al. (Japanese Patent Abstract 62253634; hereinafter "Fukuhara"). The Applicant respectfully traverses the rejection.

Claim 35, *inter alia*, recites, "...injecting at least one reactant gas into each of the plurality of plasmas such that a first flow rate of the at least one reactant gas into a first plasma is different from a second flow rate of the at least one reactant gas into a second plasma..."

Amna fails to disclose using a plurality of plasmas in combination with differential reactant gas flow rates into the plasmas as acknowledged by the Examiner. Also, Fukuhara may teach flowing the plasma at different rates into a treatment chamber, but Fukuhara does not teach or suggest flowing the at least one reactant gas into a plurality of plasmas at different rates. The Applicant recites a method step whereby at least one reactant gas is flowed into a plurality of plasmas such that a first flow rate of the at least one reactant gas into a first plasma and a second flow rate of the at least one reactant gas into a second plasma is different. Therefore Amna in view of Fukuhara does not teach or suggest each and every element of claim 35.

Furthermore, Amna teaches a RF or high frequency plasma deposition system, wherein a cathode is present inside the deposition chamber, with at least one part of a surface of a cathode

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being made coincident with the shape of a surface of a plastic part to be deposited on. The presence of a desirably shaped cathode inside the deposition chamber is essential to the teachings of Amna for the creation of plasma and the deposition of a uniform coating. Modifying Amna as suggested by the Examiner in view of Fukuhara would contradict the teachings of Amna required for obtaining a uniform coating.

Therefore, the Applicant respectfully requests that the Examiner withdraw the rejection of claim 35 under 35 U.S.C. 103(a).

Claims 36-37 were rejected under 35 U.S.C. 103(a) as being unpatentable over Amna in view of Fukuhara and further in view of Schuurmans et al. (US Patent 5,120,568; hereinafter called "Schuurmans"). The rejection is respectfully traversed.

Examiner in the office action stated that, "...Schuurmans teaches of a method of treating a surface with plasma discloses providing plasma with separate sections for generating plasma and substrate treatment by expanding a thermal plasma into the deposition chamber (Column 1, lines 34-66)..." Examiner further asserted that Schuurmans in combination with Amna and Fukuhara render claims 36-37 unpatentable. But the references must be considered as a whole. Where the teachings of two or more prior art references conflict, the references may not be combinable.

Amna teaches a RF or high frequency plasma deposition system, wherein a cathode is present inside the deposition chamber, with at least one part of a surface of a cathode being made coincident with the shape of a surface of a plastic part to be deposited on. The presence of a desirably shaped cathode inside the deposition chamber is essential to the teachings of Amna for the creation of plasma and the deposition of a uniform coating on a non-planar substrate. Modifying Amna as suggested by the Examiner in view of Fukuhara and further in view of Schuurmans would contradict the teachings of Amna required for obtaining a uniform coating. Therefore the references should not be combined and hence do not render claims 36-37 unpatentable.

Therefore Applicant respectfully requests withdrawal of the rejection.

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Claims 38-48 were rejected under 35 U.S.C. 103(a) as being unpatentable over Amna in view of Fukuhara and further in view of Mochizuki (Japanese Patent Abstract 63187619). The rejection is respectfully traversed.

As stated above, the combination of Amna and Fukuhara does not teach injecting at least one reactant gas into a plurality of plasmas. Mochizuki also does not teach injecting at least one reactant gas into a plurality of plasmas. Whether or not Mochizuki teaches or suggests a gas injector with a plurality of orifices is not pertinent as the step of injecting a reactant gas into a plurality of plasma is not taught or suggested by the combination of references. So Amna in view of Fukuhara and further in view of Mochizuki does not teach or suggest each and every element of claim 38 or claim 41 and hence does not teach or suggest the elements of all claims dependent directly or indirectly on claims 38 and claim 41.

Therefore, the Applicant respectfully requests that the Examiner withdraw the rejection of claims 38-48 under 35 U.S.C. 103(a). Applicants further request that

Double Patenting

The Examiner provisionally rejected claims 35-48 as being unpatentable over claims 32-43 of co-pending Application No. 10/62253 in view of Fukuhara. Since the obviousness type double patenting rejection is provisional, and both cases are still pending and their claims still subject to amendment, the Applicant requests that this issue be addressed upon a finding of patentable subject matter in either or both cases.

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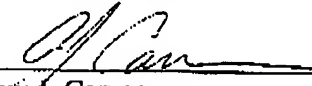
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In view of the foregoing amendment and arguments, the Applicant believes that each of claims 35-48 is now in condition for allowance. The Applicant thus courteously solicits the Examiner's review of the proposed amendment to the drawings and prompt allowance of the claims. Should the Examiner believe that anything further is needed to place the application in even better condition for allowance, the Examiner is requested to contact the Applicant's undersigned representative at the telephone number below.

Respectfully submitted,



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